Evaluation of World Health Organization Multi-Professional Patient Safety Curriculum Topics in Nursing Education: Pre-test, post-test, none-experimental study☆,☆☆,★

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The Multi-professional Patient Safety Curriculum Guide was launched by the World Health Organization to develop a patient safety-friendly curriculum in health education. The aim of this study was to evaluate the impact of teaching related to two topics from the Patient Safety Curriculum Guide on student nurses' knowledge and attitudes toward patient safety. A pretest, posttest, nonexperimental design was used. Patient safety education questionnaires were distributed to a convenience sample of 181 nursing students before the intervention, and 141 questionnaires after the intervention in one university in the East of England. The intervention consisted of two face-to-face lectures and one facilitated group work discussion. Seventy-one responses from pre- and posttest stages were matched. Paired *t* test, McNemar's test, and frequency measures were used for data analysis. The findings suggest that there are statistically significant differences in the subscales of the error and patient safety and personal influence over safety. The differences in the students' answers on patient safety knowledge before and after the interventions were not statistically significant. Although the student nurses highly commended the teaching delivered in this study, the use of experimental design in future curriculum evaluation may provide a more complementary insight to the findings of this study. (Index words: Patient safety; Nursing education; World Health Organization; Curriculum guide) J Prof Nurs 31:432–439, 2015.

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PATIENT SAFETY IS at the heart of high-quality health care and the fundamental principle for health care providers. Every point in the process of caregiving contains a certain degree of inherent risk and the potential for an adverse event to occur. Adverse events may occur because of problems from practice, products, procedures or systems (Donaldson & Philip, 2004).

Ensuring patient safety is a key priority in health care educational programs and is vital if standards are to be upheld and conveyed to developing health care practitioners. Nurses are at the forefront of patient care and therefore are well positioned to drive these agenda forward and strengthen the safety net for patient care (Vaismoradi, Salsali, & Marck, 2011). Nursing education is regarded as the bridge to quality and the link to creating the changes needed in the health care system (Sherwood, 2011).

Previously, patient safety learning has been identified as an implicit component within the nursing curriculum, rather than an explicit topic (Mansour, 2013; Pearson, Steven, & Dawson, 2009). Recognition that competencies demonstrated by new graduates need to better reflect practice preparation that includes contributing to a culture of quality and safety has led to development of frameworks for patient safety education (Sherwood & Drenkard, 2007).

Review of Literature

There has been an international drive to reform the patient safety curriculum for undergraduate health care professionals. In the United States, Cronenwett et al. (2007) suggested a framework for incorporating Quality and Safety Education for Nurses (QSEN), which contains six core competencies: patient-centered care, teamwork and collaboration, evidence-based practice, quality improvement, safety and informatics, and skills and attitudes. Several studies have endorsed the QSEN use and value in the United States (Brady, 2011; Jones, 2013; Piscotty, Grobbel, & Tzeng, 2011).

Jones (2013) conducted a pretest/posttest evaluation study of learning outcomes associated with didactic presentation of QSEN safety teaching and clinical implementation. She found that students' awareness and understanding of patient safety increased, particularly in reducing preventable errors. Brady's (2011) work supports this curriculum implementation, particularly utilizing simulation as a key tool for learning. A larger study previously conducted by Sullivan, Hirst, and Cronenwett (2009) affirms the importance of implanting a structured approach to learning regarding patient safety but also emphasized the need to bridge a perceived theory–practice gap with the use of simulated learning and clinical experience. Seibert (2014) moves this on to consider perceived deficiencies identified by a QSEN preconsortium survey (Cronenwett et al., 2007). Students were identified as meeting competencies for safe bedside care but not holding the skills for the integration of a systems-level culture of safety. Seibert recommended the use of an assignment reflecting QSEN competencies to meet this deficit.

In 2011, The World Alliance for Patient Safety, on behalf of the WHO, launched the WHO Multi-professional Patient Safety Curriculum Guide (World Alliance for Patient Safety on behalf of WHO, 2011). The guide, which targets the global audience, contains 11 patient safety topics that need to be embedded in health care education curricula (Table 1). The aim of this initiative was to assist universities and schools in health care fields, including nursing, to deliver consistent and structured patient safety education to equip the future health care workforce with the patient safety skills that would, ultimately, improve the safety and quality of health care provided. In contrast to the QSEN approach, the World Health Organization (WHO) Multi-professional Patient Safety Curriculum Guide incorporates a more explicit understanding of Human Factors and understanding of systems impact on patient safety.

Table 1. WHO Patient Safety Curriculum Guide: Multi-profession Edition 2011

1. What is patient safety
2. Why applying human factors is important for patient safety
3. Understanding systems and the effect of complexity on patient care
4. Being an effective team player
5. Learning from errors to prevent harm
6. Understanding and managing clinical risk
7. Using quality improvement methods to improve care
8. Engaging with patients and carers
9. Infection prevention and control
10. Patient safety and invasive procedures
11. Improving medication safety

This study is part of a larger international project to evaluate the impact of the teaching related to the WHO Multi-professional Patient Safety Curriculum Guide (2011) on the health care professionals' attitude and knowledge toward patient safety. To our knowledge, this is the first paper to report on the nurses' attitude and knowledge, but also effectiveness of teaching related to selected patient safety topics from the curriculum guide. This study is particularly timely. On the national level in UK, patient safety and quality is under increased scrutiny in light of the Francis Report (Department of Health, 2013; Steven, Magnusson, Smith, & Pearson, 2014). On the international level, there have been increasing efforts to develop an effective patient safety educational framework to equip future health care workforce with the necessary patient safety skills. In this context, The QSEN and the WHO Multi-professional Patient Safety Curriculum Guide stand as the two main frameworks in this regard. Several empirical studies have evaluated the impact of teaching related to the QSEN framework on nursing students (Chenot & Daniel, 2010; Jones, 2013; Miller & LaFramboise, 2009), but little is known on the impact of the teaching related to the content of the WHO Multi-professional Patient Safety Curriculum Guide.

The Study

Aim

The aim of the study was to evaluate the impact of teaching related to two patient safety topics published by the WHO Multi-professional Patient Safety Curriculum Guide on the preregistration nursing students' knowledge and attitudes toward patient safety, and their perceived effectiveness of the teaching related to the two selected patient safety topics.

Design

A pre-/posttest, nonexperiment design was utilized in this study.

Settings, Sampling, and Recruitment

Following a collaboration between the WHO Patient Safety Program and the University where this study took place, the preregistration nursing program was approved as complementary testing site for the evaluation of the Multi-professional Patient Safety Curriculum Guide. All final-year student nurses who were, at the time, enrolled in the preregistration nursing training program, from three branches of nursing (Adult, Child Health and